RESEARCH PROBLEM STATEMENT

Problem Title: Traffic Analysis Training (Permitting, Safety, Design) **No.: 05.06-7**

Submitted By: Tim Boschert (UDOT) / Grant Schultz (BYU) **E-mail:** tboschert@utah.gov gschultz@byu.edu

1. Briefly describe the problem to be addressed:

The purpose of this project is to develop a training process to supplement and aid in the effective implementation of a unified statewide traffic analysis process. Training would be established and taken from Region to Region to train affected personnel and groups on the benefits and process of performing and analyzing traffic studies. In conjunction with the development of the training process, all end users would be invited to suggest input to the process and training guide. Internal training would be developed first and secondly educate end users of the process and tools. The training would serve UDOT staff, consultants and those interested in design issues.

Traffic analysis study is an integral part in the development of identification and design toward safe and efficient systems.

UDOT and their Consultants have updated the Administrative Rule relating to Access Management and the subsequent access management program that aims to provide guidance to Department personnel in maintaining and preserving both existing and future capacity on the state roadway network. The success of access management programs has been at the forefront of state DOTs across the nation. The Utah Administrative Rule, R930-6, relating to access management has been in circulation throughout the Department since 2003. This rule provides guidance for design, operations, and project managers to better implement access management techniques in both existing and future projects. The sooner that the Department is consistent in its use and application, the sooner the Department will succeed in addressing the safety and capacity of the transportation network. It is critical that the state of Utah be at the forefront in developing long-term preservation of businesses, access, and safety of the traveling public. Traffic analysis study is an integral part in the development of identification and design toward safe and efficient systems.

Strategic Goal: ☒ **Preservation** ☒ **Operation** ☒ **Capacity** ☒ **Safety** (Check all that apply)

2. List the research objective(s) to be accomplished:

1. Development of a training analysis process to help users and customers understand the process of traffic analysis role and benefits.
2. Train Region personnel and external users on the proper use of the TIA guidelines and the importance of TIA's in this process.
3. Provide additional guidance to Region Traffic Engineers, Permits Officers, PM's, Designers and Consultants to ensure consistency statewide.

3. List the major tasks required to accomplish the research objective(s): 1 year Estimated person-hours 1,600

1. Literature review and focus groups to establish the state of the practice on traffic impact analysis training, evaluation, implementation.
2. Identify key concepts from the access management process to form the basis of the training program.
3. Develop training materials for both TIA guidelines and process and analysis of the studies.
4. Provide a canned stand alone training tool and establish a regular rotation for future training statewide.

4. Outline the proposed schedule (when do you need this done, and how we will get there):

It is recommended that this project begin in late Fall 2005, early Winter 2006 with the development of the training process.

A draft training module would be unveiled by late Spring 2006 and the training program established for the Summer 2006.

Training would be undertaken during the summer months with feedback provided and recommendations made on future training.

5. Indicate type of research and / or development project this is:

Large: ☐ **Research Project** ☐ **Development Project**
Small: ☐ **Research Evaluation** ☐ **Experimental Feature** ☐ **New Product Evaluation** ☒ **Tech Transfer Initiative**:
☐ **Other**_____

6. What type of entity is best suited to perform this project (University, Consultant, UDOT Staff, Other Agency, Other)?

University and UDOT Staff joint participation. Input from focus groups from the end users; UDOT and consultants.

7. What deliverable(s) would you like to receive at the end of the project? (e.g. useable technical product, design method, technique, training, workshops, report, manual of practice, policy, procedure, specification, standard, software, hardware, equipment, training tool, etc.)

The deliverables expected from this project would include: 1) a process and manual for performing and analyzing TIA s, 2) a set policy for training to ensure appropriate users receive training, 3) implementation of a training process to be included in the UDOT Design Manual, and 4) establishment of a rotational process to update training and ensure consistent coverage statewide.

8. Describe how this project will be implemented at UDOT.

This project will be implemented at UDOT jointly through the Project Development and traffic & safety programs. The result of this development will be extremely useful in ensuring that Department personnel from all divisions understand the importance of a uniform analysis process and how they can benefit from the program and aid the Department in providing a safe and more efficient transportation system. Out reach and education will be necessary across several UDOT divisions. Planning, Project Development, Traffic and Safety, and Right of Way (permitting).

9. Describe how UDOT will benefit from the implementation of this project, and who the beneficiaries will be.

UDOT will benefit in all divisions through a unified understanding and process of traffic impact analysis, its role, and the benefits it can provide. Expected will be increased efficiency of performance and analysis resulting from a standardized format. Consultant firms will benefit through the standardization.

10. Describe the expected risks, obstacles, and strategies to overcome these.

No known risks.

11. List the key UDOT Champion of this project (person who will help Research steer and lead this project, and will participate in implementation of the results): Tim Boschert, Access Management/Program Coordinator, (801) 965-4175

12. Estimate the cost of this research study including implementation effort (use person-hours from No. 3):$30,000

13. List other champions (UDOT and non-UDOT) who are interested in and willing to participate in the Technical Advisory Committee for this study:

Name	Organization/Division/Region	Phone	Attended UTRAC?
A) Grant Schultz	Brigham Young University	(801) 422-6332	
B) Darin Duersch	UDOT Region 1 Traffic Engineer	(801) 620-1607	
C) Ritchie Taylor	UDOT Region 2 Traffic Engineer	(801) 887-3717	
D) Doug Bassett	UDOT Region 3 Traffic Engineer	(801) 227-8019	
E) Troy Torgersen	UDOT Region 4 Traffic Engineer	(435) 893-4707	
F) Statewide Permit Officer	UDOT Project Development	(801) 964-4528	
G)			

14. Identify other Utah agencies, regional or national agencies, or other groups that may have an interest in supporting this study:

TRB Access Management Committee, NCHRP, Consultant firms, ITE